

Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Coors Brewing Company
Facility Name:	Shenandoah Brewery
Facility Location:	3.5 miles south of Elkton on U.S. 340 Rockingham County, Virginia
Registration Number:	81012
Permit Number:	VRO81012

June 6, 2005

Effective Date

July 21, 2006

Significant Modification Date

June 5, 2010

Expiration Date

R. Bradley Chewning

Regional Director, Valley Region

July 19, 2006

Signature Date

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Source Testing Report Format

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I. Facility Information

Permittee

Coors Brewing Company

P. O. Box 25

Elkton, Virginia 22827

Responsible Official

Timothy J. Williams

Vice President and Plant Manager

Facility

Shenandoah Brewery

3.5 miles south of Elkton on U.S. 340

Rockingham County, Virginia

Contact Person

Jeff Rinker

Environmental Engineer

(540) 289-8112

Plant Identification Number: 51-165-0122

Facility Description:

NAICS Code 312120 - Malt Beverages

Coors Brewing Company, Shenandoah Brewery, is engaged in the manufacture of malt beverages.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
1	V17-001	Cleaver Brooks boiler Model # D-34, Unit # W-3371 Constructed November, 1985	18 mmBTU/hr	-	-	-	4/21/2005 Permit, as amended 4/20/2006
2	V17-002	Cleaver Brooks boiler Model # D-34, Unit # W-3372 Constructed November, 1985	18 mmBTU/hr	-	-	-	4/21/2005 Permit, as amended 4/20/2006
3	V17-003	Cleaver Brooks boiler Model # D-34, Unit # W-3373 Constructed November, 1985	18 mmBTU/hr	-	-	-	4/21/2005 Permit, as amended 4/20/2006
4	-	Nebraska boiler Model # NS-E-64 Constructed January, 2002	97 mmBTU/hr	Low NO _x Burners	-	NO _x	4/21/2005 Permit, as amended 4/20/2006
5	-	Nebraska boiler Model # NS-E-64 (Construction commenced January 2006)	97 mmBTU/hr	Low NO _x Burners Flue Gas Recirculation	-	NO _x	4/21/2005 Permit, as amended 4/20/2006
6	-	Nebraska boiler Model # NS-E-64 (not yet constructed)	97 mmBTU/hr	Low NO _x Burners Flue Gas Recirculation	-	NO _x	4/21/2005 Permit, as amended 4/20/2006
Brewing							
10	-	Grain handling system (not yet constructed)	-	Fabric Filters	-	PM PM-10	4/21/2005 Permit, as amended 4/20/2006

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
20	-	Brewing process	10,000,000 barrels/yr	-	-	-	4/21/2005 Permit, as amended 4/20/2006
23	-	Fermenting (not yet constructed)	-	-	-	-	4/21/2005 Permit, as amended 4/20/2006
24	-	Maturation process (not yet constructed)	-	-	-	-	4/21/2005 Permit, as amended 4/20/2006
25	V08-004 V08-008 V08-009 V08-010 V08-013	Conditioning process (Installed after 1972)	10,000,000 barrels/yr	Closed Vessels Under CO ₂ Gas Pressure During Storage and Cleaning	-	-	4/21/2005 Permit, as amended 4/20/2006
26	V19-014 V19-015 WBT-001	By-Products handling system (Installed after 1972)	-	-	-	-	4/21/2005 Permit, as amended 4/20/2006
16	V19-011	Lime handling (Installed after 1972)	14,100 tons/yr	Fabric Filter	PCD-002	PM PM-10	4/21/2005 Permit, as amended 4/20/2006
38		CO ₂ recovery system	10,000,000 barrels/yr	-	-	-	4/21/2005 Permit, as amended 4/20/2006
Packaging							
27	V10-006 V10-007 V10-008 V10-009 V10-010 V10-011 V10-012 V10-013 V10-014	Packaging fillers process (Installed after 1972)	10,000,000 barrels/yr	-	-	-	4/21/2005 Permit, as amended 4/20/2006

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
28	V10-006 V10-007 V10-008 V10-009 V10-010 V10-011 V10-012 V10-013 V10-014	Packaging conveyor lubrication (Installed after 1972)	-	-	-	-	4/21/2005 Permit, as amended 4/20/2006
29	V10-006 V10-007 V10-008 V10-009 V10-010 V10-011 V10-012 V10-013 V10-014	Product marking (Installed after 1972)	-	-	-	-	4/21/2005 Permit, as amended 4/20/2006
30 and 31	V10-006 V10-007 V10-008 V10-009 V10-010 V10-011 V10-012 V10-013 V10-014	Carton assembly and label application (Installed after 1972)	-	-	-	-	4/21/2005 Permit, as amended 4/20/2006

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
32	V10-005	Packaging defill process (Installed after 1972)	1,182,600 lb/yr (aluminum) 19,272,000 lb/yr (glass)	Waste/Beer Collection System	-	-	4/21/2005 Permit, as amended 4/20/2006
Wastewater Treatment							
33	V19-001 V19-002 V19-004 V19-005 V19-006 V19-007 V19-008 V19-009 V19-010 V19-012 V19-013	Wastewater treatment plant	2,000,000 gallons/day (prior to brewery construction) 4,5000,000 gallons/day (after brewery construction)	VAREC Biogas flare and/or Cleaver Brooks Biogas boilers (2)	PCD-001	H ₂ S	4/21/2005 Permit, as amended 4/20/2006
16	V19-011	Lime handling	14,100 tons/yr	Fabric Filter	PCD-002	PM PM-10	4/21/2005 Permit, as amended 4/20/2006

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Fuel Burning Equipment Requirements – Units 1, 2, 3, 4, 5, and 6

A. Limitations

1. Nitrogen oxide emissions from the two (2) 97 mmBTU/hr boilers (Units 5 and 6) shall be controlled by the use of low NO_x burners and flue gas recirculation or Department of Environmental Quality approved equivalent methods.
(9 VAC 5-80-110 and Condition 4 of 4/21/2005 Permit, as amended 4/20/2006)
2. Nitrogen oxide emissions from the Unit 4 97 mmBTU/hr boiler shall be controlled by the use of low NO_x burners.
(9 VAC 5-80-110 and Condition 3 of 4/21/2005 Permit, as amended 4/20/2006)
3. The approved fuels for the six (6) process steam boilers (Units 1, 2, 3, 4, 5 and 6) are natural gas and propane. A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 18 of 4/21/2005 Permit, as amended 4/20/2006)
4. At no time shall the permittee fire all three (3) of the 97 mmBTU/hr boilers (Units 4, 5 and 6) simultaneously.
(9 VAC 5-80-110 and Condition 21 of 4/21/2005 Permit, as amended 4/20/2006)
5. The three (3) 18 mmBTU/hr boilers (Units 1, 2 and 3), combined, shall consume no more than 464 million cubic feet of natural gas per year and 433 thousand gallons of propane per year, calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
(9 VAC 5-80-110 and Condition 19 of 4/21/2005 Permit, as amended 4/20/2006)
6. The three (3) 97 mmBTU/hr boilers (Units 4, 5 and 6), combined, shall consume no more than 1,666 million cubic feet of natural gas per year and 1,556 thousand gallons of propane per year, calculated every four (4) week period as that sum of each consecutive thirteen (13) four (4) week period.
(9 VAC 5-80-110 and Condition 20 of 4/21/2005 Permit, as amended 4/20/2006)
7. Visible emissions from each of the 97 mmBTU/hr boiler stacks (Units 4, 5 and 6) shall not exceed five percent (5%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed twenty percent (20%) opacity.
(9 VAC 5-50-80, 9 VAC 5-80-110, and Condition 28 of 4/21/2005 Permit, as amended 4/20/2006)

8. Visible emissions from each of the 18 mmBTU/hr boiler stacks (Units 1, 2 and 3) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity.
(9 VAC 5-50-80 and 9 VAC 5-80-110)
9. Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.
(9 VAC 5-80-110 and Condition 22 of 4/21/2005 Permit, as amended 4/20/2006)
10. Emissions from the operation of the 97 mmBTU/hr boiler (Unit 4) shall not exceed the limits specified below:

Pollutant	Fuel Type	lbs/mmBTU (per boiler)
PM	Propane Gas	0.0066
	Natural Gas	0.0075
PM-10	Propane Gas	0.0066
	Natural Gas	0.0075
Sulfur Dioxide	Propane Gas	0.0002
	Natural Gas	0.0006
Nitrogen Oxides* (as NO ₂)	Propane Gas	0.0900
	Natural Gas	0.0900
Carbon Monoxide	Propane Gas	0.0354
	Natural Gas	0.0824
Volatile Organic Compounds	Propane Gas	0.0055
	Natural Gas	0.0054

*30-day rolling average

(9 VAC 5-80-110 and Condition 25 of 4/21/2005 Permit, as amended 4/20/2006)

11. Emissions from the operation of each of the two (2) 97 mmBTU/hr boilers (Units 5 and 6) shall not exceed the limits specified below:

Pollutant	Fuel Type	lbs/mmBTU (per boiler)
PM	Propane Gas	0.0066
	Natural Gas	0.0075
PM-10	Propane Gas	0.0066
	Natural Gas	0.0075
Sulfur Dioxide	Propane Gas	0.0002
	Natural Gas	0.0006
Nitrogen Oxides* (as NO ₂)	Propane Gas	0.0400
	Natural Gas	0.0400
Carbon Monoxide	Propane Gas	0.0354
	Natural Gas	0.0824
Volatile Organic Compounds	Propane Gas	0.0055
	Natural Gas	0.0054

*30-day rolling average

(9 VAC 5-80-110 and Condition 26 of 4/21/2005 Permit, as amended 4/20/2006)

12. Total emissions from the operation of the 97 mmBTU/hr boilers (Units 4, 5 and 6), combined, shall not exceed the limits specified below:

PM	6.80 tons/yr
PM-10	6.80 tons/yr
Sulfur Dioxide	0.52 tons/yr
Nitrogen Oxides (as NO ₂)	59.81 tons/yr
Carbon Monoxide	72.47 tons/yr
Volatile Organic Compounds	4.97 tons/yr

Annual emissions shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.

(9 VAC 5-80-110 and Condition 27 of 4/21/2005 Permit, as amended 4/20/2006)

13. Emissions from the operation of each of the 18 mmBTU/hr boilers (Units 1, 2 and 3) shall not exceed the limits specified below:

Pollutant	Fuel Type	lbs/mmBTU (per boiler)
PM	Propane Gas	0.0066
	Natural Gas	0.0075
PM-10	Propane Gas	0.0066
	Natural Gas	0.0075
Nitrogen Oxides (as NO ₂)	Propane Gas	0.0980
	Natural Gas	0.0980
Carbon Monoxide	Propane Gas	0.0354
	Natural Gas	0.0824
Volatile Organic Compounds	Propane Gas	0.0055
	Natural Gas	0.0054

(9 VAC 5-80-110 and Condition 23 of 4/21/2005 Permit, as amended 4/20/2006)

14. Total emissions from the operation of the 18 mmBTU/hr boilers (Units 1, 2 and 3), combined, shall not exceed the limits specified below:

PM	1.89 tons/yr
PM-10	1.89 tons/yr
Nitrogen Oxides (as NO ₂)	27.31 tons/yr
Carbon Monoxide	20.18 tons/yr
Volatile Organic Compounds	1.38 tons/yr

Annual emissions shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.

(9 VAC 5-80-110 and Condition 24 of 4/21/2005 Permit, as amended 4/20/2006)

B. Monitoring

- The fuel gas flow of the three (3) 18 mmBTU/hr boilers (Units 1, 2 and 3) shall be continuously measured and recorded by Equimeter Mark II Turbo-Meters fitted with the Electrocorrector-P&T or a DEQ-approved equivalent method.
(9 VAC 5-80-110 and Condition 14 of 4/21/2005 Permit, as amended 4/20/2006)

2. The fuel gas flow of the three (3) 97 mmBTU/hr boilers (Units 4, 5 and 6) shall be continuously measured by Equimeter Mark II Turbo-Meters fitted with the Electrocorector-P&T or a DEQ-approved equivalent method.
(9 VAC 5-80-110 and Condition 15 of 4/21/2005 Permit, as amended 4/20/2006)
3. A continuous emission monitoring system(s) shall be installed to measure and record the concentration of nitrogen oxides emitted by the three (3) 97 mmBTU/hr boilers (Units 4, 5 and 6). Nitrogen oxide monitor(s) shall be co-located with a CO₂ or O₂ diluent monitor. The monitor(s) shall meet the certification, operation, and maintenance requirements of 40 CFR § 60.13 and the quality assurance requirements of 40 CFR, Part 60, Appendix F, or a DEQ-approved equivalent method. A valid data point must be obtained every 15 minutes from each of the boilers being monitored in accordance with 40 CFR § 60.13 (e)(2).
(9 VAC 5-80-110 and Condition 46 of 4/21/2005 Permit, as amended 4/20/2006)
4. All continuous monitoring required by this permit shall meet minimum data availability of greater than or equal to ninety percent (90%) of the individual boiler operating hours of each of the three (3) 97 mmBTU/hr boilers (Units 4, 5 and 6) monitored sequentially, on a calendar quarter basis. The monitoring shall meet the certification, operation, and maintenance requirements of 40 CFR § 60.13 and the quality assurance requirements of 40 CFR, Part 60, Appendix F, or a DEQ-approved equivalent method.
(9 VAC 5-80-110 and Condition 48 of 4/21/2005 Permit, as amended 4/20/2006)
5. All continuous emission monitoring systems shall be installed and operational prior to conducting the initial performance tests required in Conditions III.D.2. and 3.
(9 VAC 5-80-110 and Condition 47 of 4/21/2005 Permit, as amended 4/20/2006)
6. The continuous monitoring data generated by all continuous emission monitoring systems shall be used to determine compliance with the emission limitations in Conditions III.A.10, 11 and 12; compliance shall be demonstrated on a calendar quarter basis. The permittee shall install and maintain instrumentation necessary to determine compliance during on-site inspection by DEQ. This instrumentation should indicate and record the following for the 97 mmBTU/hr boilers (Units 4, 5 and 6), at minimum:
 - a. the hourly heat input of each boiler in mmBTU/hr,
 - b. the total hourly heat input of all three boilers in mmBTU/hr, and
 - c. The 30-day rolling average NO_x emission rate in lbs/mmBTU for each boiler.

The data shall be kept on file for the most recent five (5) year period made available to the DEQ upon request.

(9 VAC 5-80-110 and Condition 49 of 4/21/2005 Permit, as amended 4/20/2006)

C. Recordkeeping

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:
 - a. The four (4) week period and annual throughput of natural gas (in million cubic feet) and propane (in 1000 gallons) for the three (3) 18 mmBTU/hr boilers (Units 1, 2 and 3). The annual throughput shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
 - b. The daily, four (4) week period, and annual throughput of natural gas (in million cubic feet) and propane (in 1000 gallons) for the three (3) 97 mmBTU/hr boilers (Units 4, 5 and 6). The annual throughput shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
 - c. Records demonstrating compliance with Condition III.A.4.
 - d. The DEQ-approved, pollutant-specific emission factors and the equations used to demonstrate compliance with Conditions III.A.10, 11, 12, 13 and 14.
 - e. Continuous monitoring data required in Condition III.B.6.
 - f. Results of all stack tests, visible emission evaluations, and performance evaluations.
 - g. Fuel supplier certifications of the sulfur content of the fuels burned in the two (2) 97 mmBTU/hr boilers (Units 5 and 6).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(40 CFR § 60.48c(g), 40 CFR § 60.48c(i), 9 VAC 5-80-110, and Condition 51 of 4/21/2005 Permit, as amended 4/20/2006)

2. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.
(9 VAC 5-80-110 and Condition 22 of 4/21/2005 Permit, as amended 4/20/2006)

D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Test ports will be provided on each of the 97 mmBTU/hr boiler (Units 4, 5 and 6) stacks.
(9 VAC 5-80-110 and Condition 30 of the 4/20/2006 Permit)
2. Initial performance tests shall be conducted for nitrogen oxides from the two 97 mmBTU/hr boilers (Units 5 and 6) to determine compliance with the emission limits contained in Condition III.A.11. The tests shall be performed, and demonstrate compliance, within sixty (60) days after achieving the maximum production rate, but in no event later than 180 days after startup of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with Director, Valley Region. The permittee shall submit a test protocol at least thirty (30) days prior to testing. One copy of the test results shall be submitted to the Director, Valley Region, within sixty (60) days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110 and Condition 43 of 4/21/2005 Permit, as amended 4/20/2006)
3. Concurrently with the initial performance tests, Visible Emission Evaluations (VEE) in accordance with 40 CFR, Part 60, Appendix A, Method 9, shall also be conducted on two 97 mmBTU/hr boilers (Units 5 and 6). Each test shall consist of thirty (30) sets of twenty-four (24) consecutive observations (at fifteen second intervals) to yield a six (6) minute average. The details of the tests are to be arranged with the Director, Valley Region. The evaluation shall be performed within sixty (60) days after achieving the maximum production rate, but in no event later than 180 days after startup of the permitted facility. One copy of the test results shall be submitted to the Director, Valley Region, within sixty (60) days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110 and Condition 44 of 4/21/2005 Permit, as amended 4/20/2006)
4. Performance evaluations of the continuous monitoring system(s) must take place during the performance tests under 9 VAC 5-50-30 or within thirty (30) days thereafter. Two (2) copies of the performance evaluations report shall be submitted to the Director, Valley Region, within forty-five (45) days of said evaluation. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.
(9 VAC 5-80-110 and Condition 47 of 4/21/2005 Permit, as amended 4/20/2006)

5. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
NO _x	EPA Method 7
SO ₂	EPA Method 6
CO	EPA Method 10
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

E. Reporting

The permittee shall submit reports to the Director, Valley Region, within thirty (30) days after the end of each calendar quarter for the three (3) 97 mmBTU/hr boilers (Units 4, 5 and 6). Each quarterly report shall contain, at a minimum, the following:

1. The source operating time, in hours;
2. For each boiler operating day, the information required under 40 CFR § 60.49b (g)(1), (g)(2), and (g)(3);
3. The quality assurance information required under 40 CFR § 60.49b (g)(10);
4. The date(s) and time(s) of all outages of the NO_x continuous monitoring system, with reasons for the outages, and corrective actions taken; and
5. The calculated NO_x emission rates, in lbs/mmBtu.

One copy of the quarterly report shall be sent to EPA at the following address:

Associate Director
Office of Air Enforcement (3AP10)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103 - 2029.

(9 VAC 5-80-110 and Condition 50 of 4/21/2005 Permit, as amended 4/20/2006)

F. Notifications

The permittee shall furnish written notification to the Director, Valley Region, of:

1. The actual date on which construction of the third 97 mmBTU/hr boiler (Unit 6) commences within ten (10) days after such date;
2. The anticipated startup date of the second and third 97 mmBTU/hr boiler (Units 5 and 6) postmarked not more than sixty (60) days nor less than thirty (30) days prior to such date;
3. The actual startup date of the second and third 97 mmBTU/hr boiler (Units 5 and 6) within ten (10) days after such date;
4. The anticipated date of the visible emission evaluation and performance tests of the two 97 mmBTU/hr boilers (Units 5 and 6) postmarked at least thirty (30) days prior to such dates; and
5. The demonstration of continuous monitoring system's performance (Units 5 and 6) postmarked at least thirty (30) days prior to the test.

Copies of written notifications referenced in items 1 through 5 shall be sent to EPA at the address specified in Condition III.E.

(40 CFR § 60.48c(a), 40 CFR § 60.7, 9 VAC 5-80-110, and Condition 52 of 4/21/2005 Permit, as amended 4/20/2006)

IV. Brewing Requirements—Units 10, 20, 23, 24, 25, 26 and 38

A. Limitations

1. Beginning with the commencement of the operation of the brewhouse, the production of beer shall not exceed ten (10) million barrels per year, calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
(9 VAC 5-80-110 and Condition 32 of 4/21/2005 Permit, as amended 4/20/2006)
2. The annual throughput of barley malt shall not exceed 133,000 tons per year, calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
(9 VAC 5-80-110 and Condition 33 of 4/21/2005 Permit, as amended 4/20/2006)
3. Particulate emissions (PM and PM-10) from the operation of the following equipment shall be controlled by fabric filters:
 - barley malt receiving system including grain receiving by railcar (choke unloading) and headhouse and internal handling (Unit 10); and
 - barley malt storage, screening, and milling system (Unit 10).

(9 VAC 5-80-110 and Condition 5 of 4/21/2005 Permit, as amended 4/20/2006)
4. Particulate emissions (PM and PM-10) from the operation of the following equipment shall not exceed the limits specified below:

Equipment	Pollutant	Lbs/hr	tons/yr
Barley Malt Receiving System – Grain Receiving by Railcar and Headhouse and Internal Handling (Unit 10)	PM	1.3	1.1
	PM-10	0.3	0.3
Barley Malt Storage, Screening, and Milling System (Unit 10)	PM	0.3	0.6
	PM-10	0.2	0.5

Annual emissions shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.

(9 VAC 5-80-110 and Condition 35 of 4/21/2005 Permit, as amended 4/20/2006)

5. Visible emissions from all fabric filters shall not exceed five percent (5%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110 and Condition 39 of 4/21/2005 Permit, as amended 4/20/2006)

6. Volatile organic compound emissions from conditioning (Unit 25) shall be controlled by maintaining closed vessels under CO₂ gas pressure during storage and cleaning activities.
(9 VAC 5-80-110 and Condition 6 of 4/21/2005 Permit, as amended 4/20/2006)
7. Prior to commencement of operation of the brewhouse, volatile organic compound emissions from the operation of the equipment listed below shall not exceed the following limits:

Equipment	tons/month	tons/yr
Conditioning Process (Unit 25)	0.66	3.00
By-Products Handling System (Unit 26)	0.22	1.00

Annual emissions shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.

(9 VAC 5-80-110 and Condition 36 of 4/21/2005 Permit, as amended 4/20/2006)

8. Beginning with commencement of operation of the brewhouse, volatile organic compound emissions from the operation of the equipment listed below shall not exceed the following limits:

Equipment	tons/month	tons/yr
Brewing Process (Unit 20)	0.73	5.12
Fermentation (Unit 23)	4.18	4.48
Maturation Process (Unit 24)	0.24	2.85
Conditioning Process (Unit 25)	0.34	3.73
By-Products Handling System (Unit 26)	0.12	1.46
CO ₂ Recovery System (Unit 38)	0.61	7.16

Annual emissions shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.

(9 VAC 5-80-110 and Condition 37 of 4/21/2005 Permit, as amended 4/20/2006)

9. Beginning with the commencement of operation of the brewhouse, particulate emissions (PM and PM-10) from the operation of the brewing process (Unit 20) shall not exceed 0.3 tons per month and 2.1 tons per year. Annual emissions shall be calculated every four (4) week period as the sum of thirteen (13) consecutive four (4) week period.
(9 VAC 5-80-110 and Condition 38 of 4/21/05 Permit, as amended 4/20/2006)

10. Visible emissions from the following equipment shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A):

- brewing process (Unit 20);
- fermentation (Unit 23);
- maturation process (Unit 24);
- conditioning process (Unit 25); and,
- by-products handling system (Unit 26).

(9 VAC 5-50-80 and 9 VAC 5-80-110)

B. Monitoring

1. Each fabric filter required in Condition IV.A.3 shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. Each device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendation. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filter is operating. A log shall be maintained in paper copy or electronic format to record the pressure drop across each fabric filter once a month.

(9 VAC 5-80-110 and Condition 17 of 4/21/2005 Permit, as amended 4/20/2006)

2. The permittee shall conduct monitoring as specified in the Fabric Filter Compliance Assurance Monitoring (CAM) Plan (Attachment A) for each fabric filter in Unit 10.
(9 VAC 5-80-110 and 40 CFR § 64.6(c))
3. The permittee shall develop a Quality Improvement Plan (QIP) for the fabric filters if two excursions from the indicator specified in the Fabric Filter Compliance Assurance Monitoring (CAM) Plan for Unit 10 (Attachment A) occur within a two week period, according to 40 CFR § 64.8.
(9 VAC 5-80-110 and 40 CFR § 64.8)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

1. Annual throughput of barley malt (in tons) [Unit 10], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
2. Annual total of beer brewed (in 1000 barrels) [Unit 20], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
3. Annual throughput of waste beer through waste beer tanks (by volume) [Unit 26], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
4. Annual total of CO₂ consumed (by weight) during conditioning activities [Unit 25], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
5. Four (4) week period and annual particulate emissions (in tons) from the grain handling system (Unit 10). Annual emissions shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
6. Differential pressure drop logs required in Condition IV.B.1.
7. Inspection records as required by the Fabric Filter Compliance Assurance Monitoring (CAM) Plan (Attachment A) in Condition IV.B.2. These records shall include, but are not limited to:
 - a. Visible emissions observation records for each fabric filter including date, time, and name of qualified person performing each observation.
 - b. Method 9 Visible Emissions Evaluation results.
 - c. Monthly and annual inspection logs, which include bag filter condition.
 - d. Pressure drop records when necessary.
 - e. Record of all excursions, including date, time and corrective actions taken.
8. The DEQ-approved VOC emission factors and the equations used to demonstrate compliance with Conditions IV.A.7 and 8.
9. Four (4) week period and annual VOC emissions (in tons) from the brewing process (Unit 20), fermentation (Unit 23), the maturation process (Unit 24), the conditioning process (Unit 25), the by-products handling system (Unit 26), and the CO₂ recovery system (Unit 38) Annual emissions shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.

10. The annual total of CO₂ system outage (by time), calculated every four (4) week period as the sum of thirteen (13) consecutive four (4) week periods.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 and Condition 51 of 4/21/2005 Permit, as amended 4/20/2006)

D. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

E. Reporting

Written reports containing the following information pertaining to the CAM Plan for the fabric filters (Unit 10) shall be submitted to the Director, Valley Region, no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. Summary of information on the number, duration, and cause (including unknown cause, if applicable) of excursions and the corrective actions taken;
2. A description of actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the plan has been completed and reduced the likelihood of similar levels of excursions.

The information listed above may be included in the reports required by Condition X.C.3. (9 VAC 5-80-110 and 40 CFR § 64.9(a)(2))

F. Notifications

The permittee shall furnish written notification to the Director, Valley Region, of:

1. The actual date(s) on which construction of the new emission unit(s) commenced within ten (10) days after such date.
2. The anticipated startup date(s) of the new emission unit(s) postmarked not more than sixty (60) nor less than thirty (30) days prior to such date.
3. The actual startup date(s) of the new emission unit(s) within ten (10) days after such date.

(9 VAC 5-80-110 and Condition 52 of 4/21/2005 Permit, as amended 4/20/2006)

V. Packaging Requirements – Units 27, 28, 29, 30, 31 and 32

A. Limitations

1. Prior to commencement of operation of the brewhouse, the annual throughput of beer through packaging shall not exceed eight (8) million barrels per year, calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
(9 VAC 5-80-110 and Condition 31 of 4/21/2005 Permit, as amended 4/20/2006)
2. Beginning with the commencement of operation of the brewhouse, the production of beer through packaging shall not exceed ten (10) million barrels per year, calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
(9 VAC 5-80-110 and Condition 32 of 4/21/2005 Permit, as amended 4/20/2006)
3. Volatile organic compound emissions from the packaging operation (Unit 27) shall be controlled by beer dispensing technology and beer spillage management practices. The beer dispensing technology and beer spillage management shall include fillers which are operated to minimize overfill of containers. The packaging operation shall be maintained by the permittee such that it is in proper working order at all times.
(9 VAC 5-80-110 and Condition 7 of 4/21/2005 Permit, as amended 4/20/2006)
4. Volatile organic compound emissions from the defill operation (Unit 32) shall be controlled by the use of a water spraying system. The water spraying system shall be maintained by the permittee such that it is in proper working order at all times and shall be in operation when the bottles and cans are crushed.
(9 VAC 5-80-110 and Condition 8 of 4/21/2005 Permit, as amended 4/20/2006)
5. Volatile organic compound emissions from conveyor line lubrication (Unit 28) shall be controlled by the use of the current low-VOC content lubricants, lubrication methods, and lubricant spillage management practices. As new low-VOC content lubricants become available, the permittee shall evaluate the feasibility of their use. The conveyor line lubrication system operation shall be maintained by the permittee such that it is in proper working order at all times.
(9 VAC 5-80-110 and Condition 9 of 4/21/2005 Permit, as amended 4/20/2006)
6. Volatile organic compound emissions from product marking (Unit 29) shall be controlled by the use of the current low-VOC content product marking inks and makeup cleaners. As new inks and makeup cleaners become available, the permittee shall evaluate the feasibility of their use. The product marking operations shall be maintained by the permittee such that it is in proper working order at all times.
(9 VAC 5-80-110 and Condition 10 of 4/21/2005 Permit, as amended 4/20/2006)

7. Volatile organic compound emissions from carton assembly (Unit 30) and bottle label application (Unit 31) shall be controlled by the use of low-solvent (less than 1% volatile organic compounds by weight for carton assembly and less than 2% volatile organic compounds by weight for bottle label application) based glues.
(9 VAC 5-80-110 and Condition 11 of 4/21/2005 Permit, as amended 4/20/2006)
8. Prior to commencement of operation of the brewhouse, volatile organic compounds from the operation of the equipment listed below shall not exceed the following limits:

Equipment	tons/month	tons/yr
Packaging (Unit 27)	24.40	110.80
Conveyor Line Lubrication (Unit 28)	1.10	5.00
Product Marking (Unit 29)	1.88	8.55
Carton Assembly (Unit 30)	0.22	1.00
Bottle Label Application (Unit 31)	2.86	13.00
Defilling (Unit 32)	2.50	16.00

Annual emissions shall be calculated as the sum of each consecutive thirteen (13) four (4) week period.

(9 VAC 5-80-110 and Condition 36 of 4/21/2005 Permit, as amended 4/20/2006)

9. Beginning with commencement of operation of the brewhouse, volatile organic compound emissions from the operation of the equipment listed below shall not exceed the following limits:

Equipment	tons/month	tons/yr
Packaging (Unit 27)	30.8	140.00
Conveyor Line Lubrication (Unit 28)	1.76	8.00
Product Marking (Unit 29)	2.42	11.00
Carton Assembly (Unit 30)	0.22	1.00
Bottle Label Application (Unit 31)	3.52	16.00
Defilling (Unit 32)	2.50	16.00

Annual emissions shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.

(9 VAC 5-80-110 and Condition 37 of 4/21/2005 Permit, as amended 4/20/2006)

B. Monitoring and Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

1. Annual total of cans filled (by volume) [Unit 27], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
2. Annual total of bottles filled (by volume) [Unit 27], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
3. Annual total of kegs filled (by volume) [Unit 27], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
4. Annual total of beer packaged (in 1000 barrel) [Unit 27], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
5. The annual total of bottle glass recovered from bottle defill crushing operations (in weight) [Unit 32], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
6. The annual total of can aluminum recovered from can shredding operations (in weight) [Unit 32], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
7. The annual total of conveyor line lubricant used (in gallons) [Unit 28], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
8. The annual total of product marking ink used (by volume) [Unit 29], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
9. The annual total of carton assembly glue used (by weight) [Unit 30], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
10. The annual total of label application glue used (by weight) [Unit 31], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
11. The DEQ-approved VOC emission factors and the equations used to demonstrate compliance with Condition V.A.8 and 9.

12. Four (4) week period and annual VOC emissions (in tons) from packaging (Unit 27), the conveyor line lubrication (Unit 28), product marking (Unit 29), carton assembly (Unit 30), bottle label application (Unit 31), and defilling (Unit 32). Annual emission shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
13. Certified MSDS sheets showing VOC content (by weight) for each conveyor line lubricant, product marking ink, carton assembly glue, and label application glue.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 and Condition 51 of 4/21/2005 Permit, as amended 4/20/2006)

C. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a

(9 VAC 5-80-110)

VI. Wastewater Treatment Requirements – Units 16 and 33

A. Limitations

1. The approved fuel for the wastewater treatment biogas flare and the biogas boilers is primary digester gas. The approved fuel for the flare pilot flame is propane. The flare and/or biogas boilers must be used for combustion of all digester gas. A change in fuels may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 41 of 4/21/2005 Permit, as amended 4/20/2006)
2. The collection system for the wastewater treatment facility and influent structures must be covered to prevent escape of volatile organic compound emissions.
(9 VAC 5-80-110 and Condition 12 of 4/21/2005 Permit, as amended 4/20/2006)
3. Volatile organic compound emissions from the wastewater treatment facility shall be controlled by an advanced wastewater treatment system. The advanced wastewater treatment system shall be provided with adequate access for inspection. The facility shall not exceed volatile organic compound emissions limits specified in Condition VI.A.4 and shall be equipped with biogas boilers and a biogas flare for combustion of all biogas.
(9 VAC 5-80-110 and Condition 13 of 4/21/2005 Permit, as amended 4/20/2006)
4. Volatile organic compounds from the operation of the wastewater collection/treatment and sludge handling systems shall not exceed 0.88 tons per month and 4.00 tons per year. Annual emissions shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
(9 VAC 5-80-110 and Condition 42 of 4/21/2005 Permit, as amended 4/20/2006)
5. The annual throughput of lime (Unit 16) shall not exceed 14,100 tons per year, calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
(9 VAC 5-80-110 and Condition 34 of 4/21/2005 Permit, as amended 4/20/2006)
6. Particulate emissions (PM and PM-10) from the lime storage and handling system (Unit 16) shall be controlled by fabric filters:
(9 VAC 5-80-110 and Condition 5 of 4/21/2005 Permit, as amended 4/20/2006)
7. Particulate emissions (PM and PM-10) from the lime storage and handling system (Unit 16) shall not exceed the limits specified below:

PM	1.0 lbs/hr	1.0 tons/yr
PM-10	1.0 lbs/hr	1.0 tons/yr

Annual emissions shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.

(9 VAC 5-80-110 and Condition 35 of 4/21/2005 Permit, as amended 4/20/2006)

8. Visible emissions from all fabric filters shall not exceed five percent (5%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110 and Condition 39 of 4/21/2005 Permit, as amended 4/20/2006)

B. Monitoring

1. The biogas boilers and biogas flare shall be equipped with a device to ensure continuous operation of the biogas boilers and/or the biogas flare. The biogas flare shall be equipped with an automatic shutoff device and re-ignition controls. A log shall be maintained to record any periods when the biogas boilers and/or the biogas flare are non-operational.
(9 VAC 5-80-110 and Condition 16 of 4/21/2005 Permit, as amended 4/20/2006)
2. Each fabric filter required in Condition VI.A.6 shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. Each device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendation. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filter is operating. A log shall be maintained in paper copy or electronic format to record the pressure drop across each fabric filter once a month.
(9 VAC 5-80-110 and Condition 17 of 4/21/2005 Permit, as amended 4/20/2006)
3. The permittee shall conduct visible emission inspections on each fabric filter stack in Unit 16 in accordance with the following procedures and frequencies:
 - a. At a minimum of once per week, the permittee shall determine the presence of visible emissions. If during the inspection, visible emissions are observed, timely corrective action shall be taken such that the stack resumes operation with no visible emissions, or a VEE shall be conducted in accordance with 40 CFR Part 60, Appendix A, Method 9 to verify that visible emissions are below the limit in Condition VI.A.8. If visible emissions exceed the limit in Condition VI.A.8, then timely corrective actions shall be taken such that stack resumes operation with visible emissions not exceeding the limit in Condition VI.A.8.
 - b. All visible emissions inspections shall be performed when the equipment is operating.

- c. If visible emissions inspections conducted during twelve (12) consecutive weeks show no visible emissions, the permittee may reduce the monitoring frequency to once per month for that stack. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per week for that stack.

All observations, VEE results, and corrective actions taken shall be recorded.
(9 VAC 5-80-110 and Condition 45 of 4/21/2005 Permit, as amended 4/20/2006)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

1. Annual throughput of lime (in tons) [Unit 16], calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
2. Four (4) week period and annual particulate emissions (in tons) from the lime storage and handling system (Unit 16). Annual emissions shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
3. Inspection records as required by Condition VI.B.3.
4. Differential pressure drop logs required in Condition VI.B.2.
5. Four (4) week period and annual VOC emissions (in tons) from the wastewater collection/treatment and sludge handling systems. Annual emissions shall be calculated every four (4) week period as the sum of each consecutive thirteen (13) four (4) week period.
6. The daily, four week period, and annual throughput of digester gas (in million cubic feet) for the biogas boiler rated at 8.37mmBTU/hr (Unit 33). The annual throughput shall be calculated every four (4) week period as the sum of thirteen (13) consecutive four (4) week period.

(9 VAC 5-80-110 and Condition 51 of 4/21/2005 Permit, as amended 4/20/2006)

D. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

VII. Facility Wide Conditions

A. If the existing or permitted Coors' Shenandoah Brewery facility is modified by a relaxation in any enforceable limitation on the capacity or emissions of the source which would have made this facility subject to the requirements of 40 CFR § 52.21 on May 2, 1997, then the requirements of 40 CFR § 52.21 shall apply to the facility as though construction had not yet commenced on the source or modification.
(9 VAC 5-80-110 and Condition 40 of 4/21/2005 Permit, as amended 4/20/2006)

B. In order to minimize the duration and frequency of excess emissions due to malfunctions of process equipment or air pollution control equipment, the permittee shall:

1. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
2. Maintain an inventory of spare parts that are needed to minimize durations of air pollution control equipment breakdowns.

These records shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request.

(9 VAC 5-80-110 and Condition 57 of 4/21/2005 Permit, as amended 4/20/2006)

C. The permittee shall have available written operating procedures for the related air pollution control equipment. Operators shall be trained in the proper operation of all such equipment and shall be familiar with the written operating procedure. The procedures shall be based on the manufacturer's recommendations, at minimum. The permittee shall maintain records of training provided including the names of trainees, date of training, and nature of training.

(9 VAC 5-80-110 and Condition 57 of 4/21/2005 Permit, as amended 4/20/2006)

D. The portions of this permit authorizing construction and operation of the brewhouse and two 97 mmBTU/hr boilers (Units 5 and 6) shall become invalid, unless an extension is granted by the DEQ, if a program of construction is discontinued for a period of eighteen (18) months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction projects.

(9 VAC 5-80-110 and Condition 53 of 4/21/2005 Permit, as amended 4/20/2006 Permit)

VIII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
19	Diesel Fuel Storage	9 VAC 5-80-720 A	-	-
31	Rail and Truck Loading	9 VAC 5-80-720 A	-	-
35	Bottlewash	9 VAC 5-80-720 B	PM, VOC, glycol ethers	-
36	Wet Spent Grain Storage and Loadout	9 VAC 5-80-720 B	VOC	-
37	Adjuncts Handling	9 VAC 5-80-720 B	PM, PM-10	-
51	Yeast Propagation	9 VAC 5-80-720 B	VOC, SO ₂	-
52	Cooling Towers	9 VAC 5-80-720 A	-	-
53	Deozonation Towers	9 VAC 5-80-720 B	VOC (ozone)	-
54	Packaging Traymaker	9 VAC 5-80-720 B	PM, PM-10, VOC	-
55	CIP (clean-in-place) System	9 VAC 5-80-720 B	VOC	-
56	Hops Staging Room	9 VAC 5-80-720 B	VOC	-
57	Inline Defill Units – Bottle Line 3	9 VAC 5-80-720 B	VOC	-
58	Warehouse Keg Defill	9 VAC 5-80-720 B	VOC	-
59	Keg Line Defill	9 VAC 5-80-720 B	VOC	-
60	5-liter Keg Can Filling	9 VAC 5-80-720 B	VOC	-
61	Bottle Warmer	9 VAC 5-80-720 B	VOC	-
62	Flash Pasteurization	9 VAC 5-80-720 B	VOC	-
63	Central Vacuum System	9 VAC 5-80-720 B	VOC, PM, PM-10	-
64	Green Beer Centrifuges	9 VAC 5-80-720 B	VOC	-
65	Emergency Malt Loadout	9 VAC 5-80-720 B	PM, PM-10	-
-	General Ventilation	9 VAC 5-80-720 A	-	-
-	Portable Heaters	9 VAC 5-80-720 A	-	-
-	Space Heaters	9 VAC 5-80-720 A	-	-
-	Office Activities	9 VAC 5-80-720 A	-	-
-	Janitorial Cleaning/Maintenance	9 VAC 5-80-720 A	-	-
-	Architectural Repair Activities	9 VAC 5-80-720 A	-	-
-	Grounds Maintenance	9 VAC 5-80-720 A	-	-

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
-	Locker Room Ventilation	9 VAC 5-80-720 A	-	-
-	Copier Activities	9 VAC 5-80-720 A	-	-
-	Blueprint Duplication	9 VAC 5-80-720 A	-	-
-	Cafeteria Activities	9 VAC 5-80-720 A	-	-
-	Safety Devices	9 VAC 5-80-720 A	-	-
-	Air Contaminate Test Equipment	9 VAC 5-80-720 A	-	-
-	Welding, Soldering Equipment	9 VAC 5-80-720 A	-	-
-	Forklift, Truck Engines	9 VAC 5-80-720 A	-	-
-	Firefighting Equipment and Training	9 VAC 5-80-720 A	-	-
-	Quality Control Lab Activities	9 VAC 5-80-720 A	-	-
-	Air Compressors	9 VAC 5-80-720 A	-	-
-	Dumpster	9 VAC 5-80-720 A	-	-
-	Air Dryers for Instrument Air	9 VAC 5-80-720 A	-	-
-	Laboratory Activities	9 VAC 5-80-720 A	-	-
-	Sampling Activities	9 VAC 5-80-720 A	-	-
-	Solvent Storage	9 VAC 5-80-720 A	-	-
-	Cooling Ponds	9 VAC 5-80-720 A	-	-
-	Maintenance Activities	9 VAC 5-80-720 A	-	-
-	Spill Collection Tanks	9 VAC 5-80-720 A	-	-
-	Steam Vents	9 VAC 5-80-720 A	-	-
-	Boiler Treatment Operations	9 VAC 5-80-720 A	-	-
-	Nonhazardous Boiler Cleaning Activities	9 VAC 5-80-720 A	-	-
-	Portable Containers	9 VAC 5-80-720 A	-	-
-	Vents or Stacks for Sewer Lines	9 VAC 5-80-720 A	-	-
-	Purging of Natural Gas Lines	9 VAC 5-80-720 A	-	-
-	Sealed Batteries	9 VAC 5-80-720 A	-	-
-	Parking Lot Resurfacing	9 VAC 5-80-720 A	-	-
-	Decarbonators Vents	9 VAC 5-80-720 A	-	-

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
-	Relief Valves (excluding air pollution bypass valves)	9 VAC 5-80-720 A	-	-

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

IX. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed in compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR § 60.18	General Control Device Requirements	Applicable to control devices that are used to comply with applicable subparts of 40 CFR 60 or 40 CFR 61.
40 CFR 60 Subpart K (§ 60.110 - § 60.113)	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	Applicable to storage vessels for petroleum liquids which have a storage capacity greater than 40,000 gallons.
40 CFR 60 Subpart Ka (§ 60.110a - § 60.115a)	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	Applicable to storage vessels for petroleum liquids which has a storage capacity of greater than 40,000 gallons and for which construction is commenced after May 18, 1978.
40 CFR 60 Subpart Kb (§ 60.110b - § 60.117b)	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Applicable to storage vessels with a capacity greater than 40 m ³ that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984. Does not apply to vessels used to store beverage alcohol.
40 CFR 60 Subpart DD (§ 60.300 - § 60.304)	Standards of Performance for Grain Elevators	Applies to each affected facility at any grain terminal elevator or any grain storage elevator that commenced construction, modification, or reconstruction after August 3, 1978. Grain terminal elevators located at breweries are exempt from 40 CFR 60 Subpart DD.

Citation	Title of Citation	Description of Applicability
40 CFR 60 Subpart VV (§ 60.480 - § 60.489)	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	Applies to affected facilities in the synthetic organic chemicals manufacturing industry. Facilities that produce beverage alcohol are exempt from § 60.482.
40 CFR 60 Subpart WW (§ 60.490 - § 60.496)	Standards of Performance for the Beverage Can Surface Coating Industry	Applies to the following affected facilities in beverage can surface coating lines: each exterior base coat operation, each overvarnish coating operation, and each inside spray coating operation. Applies to affected facilities that commenced construction, modification, or reconstruction after November 26, 1980.
40 CFR 60 Subpart NNN (§ 60.660 - § 60.668)	Standards of Performance for VOC Emissions From Synthetic Organic Chemical Manufacturing Industry Distillation Operations	Applies to each affected facility that is part of a process unit that produces any of the chemicals listed in § 60.667 as a product, co-product, by-product, or intermediate. Does not apply to any distillation unit operating as part of process unit which produces beverage alcohols.
9 VAC 5 Chapter 60, Part I	Special Provisions	Applies to all existing, new and modified hazardous air pollutant sources for which emission standards are prescribed under Chapter 60.
9 VAC 5 Chapter 60, Part II, Article I	Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants	Applies to all existing, new and modified hazardous air pollutant sources that are subject to NESHAP Standards (40 CFR 61).
9 VAC 5 Chapter 60, Part II, Article II	Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants for Source Categories	Applies to all existing, new and modified hazardous air pollutant sources that are subject to MACT Standards (40 CFR 63).
40 CFR 82 Subpart B (§ 82.30 - § 82.42, Appendices A-F)	Servicing of Motor Vehicle Air Conditioners	Applies to any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner.
40 CFR § 82.156(a)(2)(i)(B)	Required Practices	Applies to persons pressurizing low-pressure appliances.

Citation	Title of Citation	Description of Applicability
40 CFR § 82.156(a)(4)(ii)	Required Practices	Applies to persons using recycling and recovery equipment manufactured on or after November 15, 1993.
40 CFR § 82.156(a)(5)	Required Practices	Applies to persons opening MVAC-like appliances.
40 CFR § 82.156(b)	Required Practices	Applies to persons opening and/or disposing of appliances. Does not apply to persons who maintain, service, repair, or dispose of only appliances that they own and that contain pump-out units.
40 CFR § 82.156(c)	Required Practices	Applies to system-dependant equipment that is used with appliances normally containing more than 15 pounds of refrigerant.
40 CFR § 82.156(e)	Required Practices	Applies to the return of refrigerant to appliances, except if the appliance is an MVAC or MVAC-like appliance.
40 CFR § 82.156(g)	Required Practices	Applies to all persons recovering refrigerant from MVACs or MVAC-like appliances for purposes of disposal of the appliances.
40 CFR § 82.156(i)(1)	Required Practices	Applies to owners or operators of commercial refrigeration equipment normally containing more than 50 pounds of refrigerant.
40 CFR § 82.156(i)(2)	Required Practices	Applies to owners or operators of industrial process refrigeration equipment normally containing more than 50 pounds of refrigerant.
40 CFR § 82.156(i)(3)	Required Practices	Applies to owners or operators of appliances normally containing more than 50 pounds of refrigerant.
40 CFR § 82.156(i)(4)	Required Practices	Applies to owners or operators of appliances normally containing more than 50 pounds of refrigerant.
40 CFR § 82.158(l)	Standards for Recycling and Recovery Equipment	Applies to equipment used to evacuate MVACs and MVAC-like appliances before they are disposed of.

Citation	Title of Citation	Description of Applicability
40 CFR § 82.161(a)(3)	Technician Certification	Applies to technicians who maintain, service, or repair low-pressure appliances or dispose of low-pressure appliances.
40 CFR § 82.161(5)	Technician Certification	Applies to technicians who maintain, service, or repair MVAC-like appliances.
40 CFR § 82.164	Reclaimer Certification	Applies to all persons reclaiming used refrigerant for sale to a new owner.
40 CFR § 82.166(j)	Reporting and Recordkeeping Requirements	Applies to persons servicing appliances normally containing 50 or more pounds of refrigerant.
40 CFR § 82.166(k)	Reporting and Recordkeeping Requirements	Applies to owners/operators of appliances normally containing 50 or more pounds of refrigerant.
40 CFR § 82.166(m)	Reporting and Recordkeeping Requirements	Applies to owners/operators of appliances normally containing 50 or more pounds of refrigerant.
40 CFR 60 Subpart A (§ 60.1 - § 60.19)	General Provisions	Applies to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard applicable to the facility. <u>40 CFR 60 Subpart A does not apply to Units 1, 2, 3, 10, 16, 20, 23, 24, 25, 26, 27, 28, 29, 30, 32, and 33.</u>
40 CFR § 60.7(a)(5)	Notification and Recordkeeping	Applies to continuous monitoring systems that are required in accordance with an NSPS standard (40 CFR 60. <u>40 CFR 60.7(a)(5) does not apply to Units 4, 5, and 6.</u>
40 CFR § 60.7(a)(6)	Notification and Recordkeeping	Applies to opacity observations that are required in accordance with an NSPS standard (40 CFR 60. <u>40 CFR § 60.7(a)(6) does not apply to Units 4, 5, and 6.</u>

Citation	Title of Citation	Description of Applicability
40 CFR § 60.7(a)(7)	Notification and Recordkeeping	Applies to facilities that intend to use continuous opacity monitoring system data to determine compliance with opacity standards contained within NSPS standards (40 CFR 60). <u>40 CFR 60.7(a)(7) does not apply to Units 4, 5, and 6.</u>
40 CFR § 60.7(c)	Notification and Recordkeeping	Applies to owners and operators required to install a continuous monitoring system or monitoring device in accordance with an NSPS standard (40 CFR 60). <u>40 CFR § 60.7(c) does not apply to Units 4, 5, and 6.</u>
40 CFR § 60.7(e)	Notification and Recordkeeping	Applies to owners and operators who are required to submit excess emissions and monitoring systems performance reports on a quarterly basis in accordance with an NSPS standard (40 CFR 60). <u>40 CFR § 60.7(e) does not apply to Units 4, 5, and 6.</u>
40 CFR § 60.7(f)	Notification and Recordkeeping	Applies to owners and operators who maintain and operate continuous monitoring systems or continuous monitoring devices, or were required to conduct performance tests in accordance with an NSPS standard (40 CFR 60). <u>40 CFR § 60.7(f) does not apply to Units 4, 5, and 6.</u>
40 CFR § 60.11(e)(1)	Compliance with Standards and Maintenance Requirements	Applies to facilities that are required to conduct initial compliance testing to demonstrate compliance with an opacity standard contained within an NSPS standard (40 CFR 60). <u>40 CFR 60.11(e)(1) does not apply to Units 4, 5, and 6.</u>
40 CFR § 60.11(e)(2)	Compliance with Standards and Maintenance Requirements	Applies to owners and operators of an affected facility to which an opacity standard in 40 CFR 60 applies. <u>40 CFR § 60.11(e)(2) does not apply to Units 4, 5, and 6.</u>
40 CFR§ 60.13	Monitoring Requirements	Applies to all continuous monitoring systems required under applicable subparts of 40 CFR 60. <u>40 CFR § 60.13 does not apply to Units 4, 5, and 6.</u>

Citation	Title of Citation	Description of Applicability
40 CFR 60 Subpart Db (§ 60.40b - § 60.49b)	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	Applies to steam generating units that commenced construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 100 mmBTU/hr. <u>40 CFR 60 Subpart Db does not apply to Units 1, 2, 3, 4, 5, and 6.</u>
40 CFR 60 Subpart Dc (§ 60.40c - § 60.48c)	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Applicable to steam generating units for which construction commenced after June 9, 1989, and have a maximum design heat input capacity of 100 mmBtu/hr or less, but greater than 10 mmBTU/hr. <u>40 CFR 60 Subpart Dc does not apply to Units 1, 2, and 3.</u>
40 CFR § 60.42c	Standard for Sulfur Dioxide	Applies to affected facilities that combust coal, coal refuse, coal in combination with any other fuel, and/or oil. <u>40 CFR § 60.42c does not apply to Units 4, 5, and 6.</u>
40 CFR § 60.43c	Standard for Particulate Matter	Applies to affected facilities that commence construction, reconstruction, or modification after February 28, 2005, and that combust coal, oil, gas, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 30 mmBtu/hr or greater. <u>40 CFR § 60.43c does not apply to Unit 4.</u>
40 CFR § 60.44c	Compliance and Performance Test Methods and Procedures for Sulfur Dioxide	Applies to affected facilities that are subject to the sulfur dioxide standards contained in 40 CFR § 60.42c. <u>40 CFR § 60.44c does not apply to Units 4, 5, and 6.</u>
40 CFR § 60.45c	Compliance and Performance Test Methods and Procedures for Particulate Matter	Applies to affected facilities that commence construction, reconstruction, or modification after February 28, 2005, and that combust coal, oil, gas, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 30 mmBtu/hr or greater. <u>40 CFR § 60.45c does not apply to Unit 4.</u>

Citation	Title of Citation	Description of Applicability
40 CFR § 60.46c	Emission Monitoring for Sulfur Dioxide	Applies to affected facilities that are subject to the sulfur dioxide standards contained in 40 CFR § 60.42c. <u>40 CFR 60.46c does not apply to Units 4, 5, and 6.</u>
40 CFR § 60.47c	Emission Monitoring for Particulate Matter	Applies to affected facilities that commence construction, reconstruction, or modification after February 28, 2005, and that combust coal, oil, gas, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 30 mmBtu/hr or greater. <u>40 CFR § 60.43c does not apply to Unit 4.</u>
40 CFR § 60.48c(b)	Reporting and Recordkeeping Requirements	Applies to affected facilities that are subject to the sulfur dioxide standards contained in 40 CFR 60.42c or the particulate matter standards contained in 40 CFR § 60.43c. <u>40 CFR 60.48c(b) does not apply to Unit 4.</u>
40 CFR § 60.48c(c)	Reporting and Recordkeeping Requirements	Applies to each coal-fired, residual oil-fired, or wood-fired affected facilities that are subject to the opacity limits under § 60.43c(c). <u>40 CFR § 60.48c(c) does not apply to Units 4, 5, and 6.</u>
40 CFR § 60.48c(d)	Reporting and Recordkeeping Requirements	Applies to each affected facility subject to the SO ₂ emission limits, fuel oil sulfur limits, or percent reduction requirements in § 60.42c. <u>40 CFR § 60.48c(d) does not apply to Units 4, 5, and 6.</u>
40 CFR § 60.48c(e)	Reporting and Recordkeeping Requirements	Applies to each affected facility subject to the SO ₂ emission limits, fuel oil sulfur limits, or percent reduction requirements in § 60.42c. <u>40 CFR § 60.48c(d) does not apply to Units 4, 5, and 6.</u>
40 CFR § 60.48c(h)	Reporting and Recordkeeping Requirements	Applies to each affected facility subject to a Federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under § 60.42c or § 60.43c. <u>40 CFR § 60.48c(h) does not apply to Units 4, 5, and 6.</u>

Citation	Title of Citation	Description of Applicability
9 VAC 5-80-10 J.2	Compliance Determination and Verification by Performance Testing	Applies to all existing, new and modified hazardous air pollutant sources for which emission standards are prescribed under Chapter 60.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

X. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless a timely and complete renewal application consistent, with 9 VAC 5-80-80, has been submitted, to the Department, by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, and all original strip-chart recordings or DEQ approved reports from the data acquisition system for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-110 F)
3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

(1) Exceedance of emissions limitations or operational restrictions;

(2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

(3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period”.

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Valley Region, within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation.

Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition X.C.3. of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but not later than four daytime business hours after the discovery, notify the Director, Valley Region, by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of the discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Valley Region.

1. The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the 14 day written notification.
2. The emission units subject to the reporting and the procedure requirements of 9 VAC 5-40-50 C and the procedures of 9 VAC 5-50-50 C are three 97 mmBtu/hr boilers (Units 4, 5 and 6).
3. Each owner required to install a continuous monitoring system subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable emission standard) to the board for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the following information:
 - a. The magnitude of excess emissions computed in accordance with 40 CFR § 60.13(h) or 9 VAC 5-40-41 B 6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
 - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any

malfunction (if known), the corrective action taken or preventative measures adopted;

- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

All malfunctions of emission units not subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C require written reports within 14 days of the discovery of the malfunction.

(9 VAC 5-20-180 C, 9 VAC 5-40-50 and 9 VAC 5-50-50)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall

notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
 - e. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
 - f. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Statements for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

**Fabric Filter Compliance Assurance Monitoring Plan
 (Unit 10)**

Indicator	Indicator 1-A	Indicator 1-B	Indicator 2
Measurement approach	Opacity	Visible Emission Evaluation (optional - to determine if excursion occurs)	Periodic Structural Inspections
	At a minimum of once per week, visible emission observations conducted at each control device emission point.	Method 9 VEE in accordance with 40 CFR 60, Appendix A conducted optionally to determine if an excursion occurs. Results recorded upon completion of each Method 9. If visible emissions are observed by Indicator 1-A and a Method 9 VEE is not conducted, then an excursion has occurred.	Monthly external bag filter inspections by a qualified employee. Results recorded monthly. Annual internal bag filter inspections by a qualified employee. Results recorded upon completion of each inspection.
Indicator range	An excursion is defined as the presence of any visible emission from the control device unless otherwise determined by a Method 9 VEE.	An excursion is defined as an average opacity greater than 5% during one six-minute period in any one hour.	An excursion is defined as failure to perform the monthly or annual inspection of bag filters. Excursions trigger an inspection, corrective action and a reporting requirement.
Quality Improvement Plan (QIP) Threshold	2 excursions in a 2 week period per each control device	2 excursions in a 2 week period per each control device.	NA
<u>Performance criteria:</u>			
Data Representativeness	Observation of visible emissions indicates possible damage to bag filter.	Observation of visible emissions greater than 5% indicates replacement or maintenance of bag filters is necessary.	Bags in the fabric filters shall be inspected visually for deterioration and remaining bag life monitored.
Verification of operational status	Records that indicate time, facility operational status and results of each observation.	Pressure drop across each filter.	Pressure drop across each filter.
QA/QC practices and criteria	Qualified personnel to perform observations.	Trained personnel shall perform Method 9.	Qualified personnel perform the inspection and maintenance.
Monitoring frequency and data collection procedure	At a minimum of once per week observation.	Upon the observation of visible emissions from any fabric filter.	Monthly and annually inspections.